CIVIL TECH LABS

Accredited by **NABL** as per ISO/ IEC 17025 : 2005

5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027

Ph: 080 - 4114 2867 / Mob. : 96862 31801, Email: civiltechlabs@gmail.com

T-2654

To,

Assistant Executive Engineer
Yelahanka Sub Division,
BBMP Bangalore.

16th January 2015.

Dear Sir,

Sub: Testing of Solid Blocks.

As requested, tests on physical properties were carried out for the Solid Blocks supplied by you, for the work of **'Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no. 04.'**

Please find the enclosed Test Report of the above.

Thanking You,
For Civil Tech Labs

(KHUSHBOO L.)
Quality Manager

AEE

CIVIL TECH LABS
#5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027
Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT
TESTS ON SOLID BLOCKS

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP
Name of Work	Improvements to drains and asphalting to main and cross roads in Someshwarnagara in Ward no. 04.
Name of Agency	M/s. K. R. L. D. L.
Date of Testing	16/01/2015
Technical Reference	IS: 2185(Part-I)-2005 (Reaffirmed 2010)
No. of samples tested	8
Grade	C (4.0)

1. COMPRESSIVE STRENGTH

Sl. No.	Nominal Dimension (cms)	Compressive strength (N/mm²)	Minimum Compressive Strength as per IS: 2185(Part-I)-2005 (Reaffirmed 2010)	
			Individual	Avg. of 8 samples
1	40x20x20	4.4	Minimum Compressive Strength of Individual Units	Minimum Average Compressive Strength of Units
2		4.2		
3		4.3	For Grade C (5.0)- 4.0 N/mm² For Grade C (4.0)- 3.2 N/mm²	For Grade C (5.0)- 5.0 N/mm² For Grade C (4.0)- 4.0 N/mm²
4		4.2		
5		4.6		
6		4.5		
7		4.4		
8		4.3		
Average Compressive strength (N/mm²)		4.4		

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2. WATER ABSORPTION

Sl. No.	Nominal Dimension (cms)	Water Absorption (% by weight)	Average (% by weight)	Requirements as per IS : 2185(Part-I)-2005 (Reaffirmed 2010)
1	40x20x20	7.23	7.26	When three samples are tested the average water absorption shall not be more than 10% by mass
2		7.26		
3		7.29		

3. BLOCK DENSITY

Sl. No.	Nominal Dimension (cms)	Block Density (Kg/cum)	Average (Kg/cum)	Requirements as per IS : 2185(Part-I)-2005 (Reaffirmed 2010)
1	40x20x20	1865.3	1867.8	The Solid Concrete blocks used as load bearing units shall have average block density not less than 1800Kg/m³
2		1868.9		
3		1869.2		

Remarks	Satisfies the Requirements.

Note:

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Lab Incharge
Civil Tech Labs

AEE

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Ph: 080 - 4114 2867 / Mob. : 96862 31801, Email: civiltechlabs@gmail.com

T-2654

To,

Assistant Executive Engineer
Yelahanka Sub Division,
BBMP Bangalore.

05th March 2015

Dear Sir,

Sub: Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no. 04.
Testing of cubes – Reg.

As requested the 28th day Compressive Strength Test of Cubes was carried out for the above work for the samples supplied by you.

Please find the enclosed Test Reports of the above.

Thanking you,

For Civil Tech Labs,

Khushboo

(KHUSHBOO L.)
Quality Manager

AEE.

CIVIL TECH LABS
5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027
Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP
Name of Work	Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no 04.
Name of Agency	M/s. K. R. I. D. L
Grade of Concrete	M-20
No. of cubes tested	3
Dimension of Specimen	150mmx150mmx150mm
Cross Sectional Area	22500 mm²
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	Identification	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm²)	Avg Compressive Strength (N/mm²)
1	CC-Work	02/02/2015	02/03/2015	28	8.17	480	21.33	21.63
2					8.19	485	21.56	
3					8.20	495	22.00	

Note:
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Lab Incharge
Civil Tech Labs

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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP
Name of Work	Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no 04.
Name of Agency	M/s. K. R. I. D. L.
Grade of Concrete	M-30
No. of cubes tested	3
Dimension of Specimen	150mmx150mmx150mm
Cross Sectional Area	22500 mm²
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	Identification	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm²)	Avg Compressive Strength (N/mm²)
1	CC Work	04/02/2015	04/03/2015	28	8.16	475	21.11	21.33
2					8.18	480	21.33	
3					8.20	485	21.56	

Note:
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TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP
Name of Work	Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no 04.
Name of Agency	M/s. K. R. I. D. L.
Grade of Concrete	M-20
No. of cubes tested	3
Dimension of Specimen	150mmx150mmx150mm
Cross Sectional Area	22500 mm²
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	Identification	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm²)	Avg Compressive Strength (N/mm²)
1	CC-Work	05/02/2015	05/03/2015	28	8.19	485	21.56	21.78
2					8.20	490	21.78	
3					8.21	495	22.00	

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T-2654

To,

Assistant Executive Engineer
Yelahanka Sub Division,
BBMP Bangalore.

28th February 2015

Dear Sir,

Sub: Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no. 04.
Testing of cubes – Reg.

As requested the 28th day Compressive Strength Test of Cubes was carried out for the above work for the samples supplied by you.

Please find the enclosed Test Reports of the above.

Thanking you,

For Civil Tech Labs,

Khushboo

(KHUSHBOO L.)
Quality Manager

AEE

CIVIL TECH LABS
5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027
Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP
Name of Work	Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no. 04
Name of Agency	M/s. K. R. I. D. L
Grade of Concrete	M-20
No. of cubes tested	3
Dimension of Specimen	150mmx150mmx150mm
Cross Sectional Area	22500 mm²
Technical Reference	IS. 516-1959 [Reaffirmed 2013]

Sl. No.	Identification	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm²)	Avg Compressive Strength (N/mm²)
1	CC-Work	31/01/2015	28/02/2015	28	8.17	470	20.89	21.41
2					8.18	485	21.56	
3					8.21	490	21.78	

Note:
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Lab Incharge
Civil Tech Labs

AEE

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T-2654

To,

Assistant Executive Engineer
Yelahanka Sub Division,
BBMP Bangalore.

24th February 2015

Dear Sir,

Sub: Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no. 04.
Testing of cubes – Reg.

As requested the 28th day Compressive Strength Test of Cubes was carried out for the above work for the samples supplied by you.

Please find the enclosed Test Reports of the above.

Thanking you,

For Civil Tech Labs,

(KHUSHBOO L.)
Quality Manager

AEE

CIVIL TECH LABS
5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027
Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT

COMPRESSIVE STRENGTH TEST ON CONCRETE CUBES

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP
Name of Work	Improvements to drains and asphalting to main and cross roads in Someshwaranagara in Ward no-04
Name of Agency	M/s. K. R. L. D. L
Grade of Concrete	M-20
No. of cubes tested	3
Dimension of Specimen	150mmx150mmx150mm
Cross Sectional Area	22500 mm²
Technical Reference	IS: 516-1959 (Reaffirmed 2013)

Sl. No.	Identification	Date of Casting	Date of Testing	Age at test (Days)	Weight (Kg)	Failure Load (KN)	Compressive Strength (N/mm²)	Avg Compressive Strength (N/mm²)
1	CC-Work (Covering Slab)	27/01/2015	24/02/2015	28	8.17	480	21.33	21.70
2					8.19	490	21.78	
3					8.23	495	22.00	

Note:
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Lab Incharge
Civil Tech Labs

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T-2654

To,

Assistant Executive Engineer
Yelahanka Sub Division,
BBMP Bangalore.

20th February 2015.

Dear Sir,

Sub: Tests on Wet Mix Macadam.

As requested, tests on physical properties were carried out for the Wet Mix Macadam supplied by you, for the work of **'Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no. 04.'**

Please find the enclosed Test Report of the above.

Thanking You,
For Civil Tech Labs

Khushboo

(KHUSHBOO L.)
Quality Manager

AEE

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Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT

TEST ON AGGREGATES ['AIV' & Combined Flakiness & Elongation Index]

Wet Mix Macadam

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP
Name of Work	Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no. 04.
Agency of the Name	M/s. K. R. I. D. L
Date of Testing	20/02/2015
Reference	**MORTH Table 400-10**

Sample No	Aggregate Impact Value 'AIV' in %	Average AIV in %	Remarks
1	22.6	23.1	Satisfactory (As per MORTH for WMM, Maximum allowed AIV is 30 %)
2	23.5		

Test	Result in %	Combined Flakiness & Elongation Index 'C-F&E' in %	Remarks
Flakiness Index	12.5	25.6	Satisfactory (As per MORTH for WMM, Maximum allowed 'C-F&E' is 30 %)
Elongation Index	13.1		

Note:

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AEE

Lab Incharge
Civil Tech Labs

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T-2654

To,

Assistant Executive Engineer
Yelahanka Sub Division,
BBMP Bangalore.

06th March 2015.

Dear Sir,

Sub: Tests on Semi Dense Bituminous Concrete.

As requested, tests on physical properties were carried out for the Semi Dense Bituminous Concrete supplied by you, for the work of **'Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no. 04.'**

Please find the enclosed Test Report of the above.

Thanking You,
For Civil Tech Labs

(KHUSHBOO L.)
Quality Manager

AEE

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5, 1st Cross, Srinivasa Colony, Mission Road, Bangalore - 560027
Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT

STRIPPING TEST OF ROAD AGGREGATES

Semi Dense Bitumenous Concrete

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP
Name of Work	Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no. 04
Name of Agency	M/s. K. R. I. D. L.
Date of Testing	26/03/2015

Method of Test	Observation No.	Uncovered Area/Stripping in %	Average Stripping Value in %	As Per Morth Table 500-17	Remarks
IS 6241-1971 Reaffirmed 2003)	1	4.2	4.1	5 % Maximum	Satisfactory
	2	3.8			
	3	4.3			

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Lab Incharge
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AEE

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TEST REPORT

WATER ABSORPTION TEST OF ROAD AGGREGATES

Semi Dense Bitumenous Concrete (SDBC)

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP
Name of Work	Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no. 04.
Name of Agency	M/s. K. R. I. D. L.
Date of Testing	06/03/2015

Method of Test	Sample No.	Water Absorption in %	Average Water Absorption in %	As per MORTH Table 500-14	Remarks
IS 2386 (Part 3)	1	0.78	0.86	2 % Maximum	Satisfactory
	2	0.88			
	3	0.92			

Note:

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Lab Incharge
Civil Tech Labs

AEE

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Ph: 080 - 4114 2867, Email: civiltechlabs@gmail.com

TEST REPORT

TEST ON AGGREGATES ('AIV' & Combined Flakiness & Elongation Index)

Semi Dense Bitumenous Concrete

Name & Address of the Customer	AEE, Yelahanka Sub Division, BBMP
Name of Work	Improvements to drains and asphalting to main and cross roads in Someshwaranagara in ward no. 04.
Name of Agency	M/s. K. R. I. D. L.
Date of Testing	06/03/2015
Reference	MORTH Table 500-14

Sl. No	Aggregate Impact Value 'AIV' in %	Average AIV in %	Remarks
1	22.3	22.0	Satisfactory (As per MORTH for SDBC, Maximum allowed AIV is 27 %)
2	21.6		

Test	Result in %	Combined Flakiness & Elongation Index 'C-F&E' in %	Remarks
Flakiness Index	11.6	24.1	Satisfactory (As per MORTH for SDBC, Maximum allowed 'C-F&E' is 30 %)
Elongation Index	12.5		

Note:
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Lab Incharge
Civil Tech Labs

AEE